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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,688	08/04/2005	Patrick Choquet	Q86074	1679

23373 7590 09/19/2007  
SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER
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SHEVIN, MARK L

ART UNIT	PAPER NUMBER
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1709

MAIL DATE	DELIVERY MODE
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09/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/522,688

Applicant(s)

CHOQUET ET AL.

Examiner

Mark L. Shevin

Art Unit

1709

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-25 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Status***

Amended claims 1-25, filed 31 January 2005 are pending.

### ***Restriction***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-13, drawn to a process of coating a metal material

Group II, claims 22-23, drawn to an apparatus for coating a metal material

Group III, claims 24-25, drawn to a metal material (product).

The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The special technical feature which is referred to Annex B of Appendix A1 of the MPEP (Administrative Instructions under the PCT, "Unity of Invention"). The express "special technical features" are defined as meaning those technical features that define a contribution which each of the inventions, considered as a whole, make over the prior art (Rule 13.2). Unity exists only when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding claimed special technical features.

In this case, the technical feature shared by each invention is a metal material. The questions of unity of invention has been reconsidered retroactively by the examiner in view of the search performed; a review of US Patent 2,315,740 (Schoonmaker) makes clear that the inventions of the groups I-III lack the same or corresponding special technical feature because the cited reference appears to demonstrate that the claimed technical feature (a metal material, "ferrous metals", P. 1, Col. 1, Lines 1-5) does not define a contribution which each of the inventions, considered as a whole, makes over the prior art. Accordingly, the prior art of record supports restriction of the claimed subject matter in to the groups as mentioned immediately above.

### ***Election of Species***

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

#### **Group I**

##### ***First subset,***

- A. Metal material to be coated is a carbon steel
- B. Metal material to be coated is a stainless steel
- C. Metal material to be coated is aluminum or alloy

##### ***Second subset,***

- A. First coating produced by means of electrodeposition
- B. First coating produced by means of physical vapour deposition

##### ***Third subset,***

- A. Second coating is produced by electrodeposition
- B. Second coating is produced by physical vapor deposition

##### ***Fourth subset,***

- A. First and/or second coatings are constituted by tin
- B. First and/or second coatings are constituted by aluminum

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*Fifth subset,*

- A. Means for rapid heating is infra-red heating device
- B. Means for rapid heating is induction heating device
- C. Means for rapid heating is plasma discharge
- D. Means for rapid heating is ion bombardment

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

The first subset deals with a metal material, the second and third with two distinct coatings, the fourth with the composition of the coatings, and the fifth with the method used to heat the substrate and apply a coating. Apart from a very weak similarity in that the first and fourth subsets are drawn to metals, there are no common technical features to unite the species.

Lack of unity of invention may be directly evident "a priori", that is, before considering the claims in relation to any prior art, or may only become apparent "a posteriori", that is, after taking the prior art into consideration. For example, the independent claims to A+X, A+Y, X+Y can be said to lack unity a priori as there is no subject matter common to all claims. In the case of independent claims A+X and A+Y, unity of inventions (i.e. species) is present a priori as A is common to both claims.

**Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable.** The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The following claim(s) are generic:

**Claim 1 is generic to all the species indicated .**

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark L. Shevin whose telephone number is (571) 270-3588. The examiner can normally be reached on Monday - Thursday, 8:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571) 272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark L. Shevin  
10-522,688

VICKIE Y. KIM  
SUPERVISORY PATENT EXAMINER

A large, stylized handwritten signature in black ink, likely belonging to Vickie Y. Kim, is written over the printed name and title.